

## County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

November 08, 2013

Mr. Francis A. McDermott 1751 Pinnacle Drive, Suite 1700 Mclean, VA 22102-0000

Re:

SEA 80-LV-061-02

Dear Mr. McDermott:

The Special Exception Amendment Application submitted on behalf of Furnace Associates, Inc. has been reviewed for compliance with the provisions of Section 9-011 of the Fairfax County Zoning Ordinance. Based on this review, it has been determined that the form of the application meets the minimum submission requirements and has been accepted for processing. SEA 80-LV-061-02 is the application number assigned to the case; please use this number in all future correspondence or inquiries regarding the application. A copy of the application form noting the date of acceptance and a receipt for the fee are attached for your records. If you have any questions regarding the acceptance of the application, please call the Application Acceptance Section at (703) 324-1290.

This application will now be scheduled for a public hearing and assigned to a Staff Coordinator who will call to inform you of the scheduled hearing date. The Staff Coordinator will be your principal contact with County staff during the review of the application. Any substantive deficiencies which may be discovered during the evaluation of the application must be corrected in a timely manner in order for the application to proceed to public hearing. If you have questions regarding staff assignments or schedules, please call (703) 324-1290, give the application number cited in the previous paragraph, and you will be directed to the appropriate Branch Chief.

We look forward to working with you on this application.

Sincerely

Virginia H. Ruffner, Planner III

Application Acceptance Section, ZED, DPZ

VHR

Attachments: a/s

File: SEA 80-LV-061-02

www.fairfaxcounty.gov/dpz/



#### **COUNTY OF FAIRFAX**

APPLICATION No:

SEA 80-L/V-061-2

Department of Planning and Zoning **Zoning Evaluation Division** 

RECEIVED

12055 Government Center Parkway, Suite 801 Fairfax, VA 22035

(703) 324-1290, TTY 711

Department of Planning & Zoning

(Staff will assign)

www.fairfaxcounty.gov/dpz/zoning/applications

OCT 0 7 2013

### APPLICATION FOR A SPECIAL EXCEPTION Onling Evaluation Division

		(PLEASE TY	PE or PRINT	IN BLACK INK)			
APPLICANT	NAME	Furnace Asso	ciates, Inc.				
	MAILING ADDRESS 11220 Assett Loop, Suite 201 Manassas, VA 20109						
	PHONE	HOME (	)	W	ORK (	)	
	PHONE	MOBILE (					
	PROPERT	TY ADDRESS	5 10001, 102 Lorton, VA	201, 10209, 102 <u>1</u> 5 22079	i, 10219, 102	29 Furnace Road	
PROPERTY	TAX MAP		2 2 //1)\ 1	S	SIZE (ACRI		
INFORMATION	700NING	-5(pt.), 7, 8; 11	3-3-((1))-1,		±249.82 acre		
	R-1	DISTRICT		N	MAGISTER	IAL DISTRICT	
					Mt Vernon	* :	
	N/A				EZONING	APPLICATION:	
	ZONING	ORDINANCE	SECTION				
SPECIAL EXCEPTION REQUEST INFORMATION	§3-104; §9-	-201; §9-301; §	§9-304; §9-5	01; §9-607			
	PROPOSE maximum ele associations Energy Park)	evation; green en and/or golf driving	eray electrical	generating facilities ar	nd quasi-public	ris landfill with no change in use; private club/public benefit si-public use only (Green	
		ncis A. McDer			THE BOOK ON A COUNTY OF THE STATE OF THE STA		
	MAILING	ADDRESS +	lunton & Wil	liams LLP			
AGENT/CONTACT				e Drive, Suite 1700	0		
<b>INFORMATION</b>	DILONE		/IcLean, VA				
	PHONE	HOME (	)	V	WORK (703	3 ) 714-7422	
	PHONE	MOBILE	,				
MAILING				ne): Applicant			
The name(s) and addre made part of this appli Fairfax County staff re process the application	cation. The presentativ	undersigned	has the no	wer to authoriz	seath has as	haraby outhorize	
Francis A. McDermott, Att	orney & Ager	nt for Applicant		Miles	MA	10.7.12	
TYPE/PRINT NAME	OF APPLI	CANT/ACE	NT	SIGNATURE	OF ADDI	ICANT/ACENT	

DO NOT WRITE IN THIS SPACE

Date Application accepted: November 8, 2013 Application Fee Paid: \$



HUNTON & WILLIAMS LLP 1751 PINNACLE DRIVE SUITE 1700 MCLEAN, VIRGINIA 22102

TEL

703 • 714 • 7400 703 • 714 • 7410

November 4, 2013

**BY HAND** 

FRANCIS A. MCDERMOTT DIRECT DIAL: 703 • 714 • 7422 EMAIL: fmcdermott@hunton.com

FILE NO: 65145.8

Ms. Virginia H. Ruffner Zoning Evaluation Division Fairfax County Department of Planning and Zoning 12055 Government Center Parkway, Suite 800 Fairfax, Virginia 22035

# Furnace Associates, Inc. Special Exception Amendment SEA 80-L/V-061-2 Application Fairfax County Tax Map Parcel 113-1-((1))-5(part), 7, 8; 113-3-((1))-1, 2, 4

#### Dear Virginia:

As a follow-up to my correspondence dated October 7, 2013, and in response to your review comments provided by letter dated October 24, 2013, the Applicant hereby submits a revised Special Exception Amendment Plat for the referenced application. Your review comments have been addressed as follows:

Item 1.00	SEA PLAT:					
	1.) PLEASE PROVIDE TABS FOR PHASE SIX ON PAGE 45 OF 45 OR INCLUDE WITH PHASE 1-5 ON PAGE 2 OF 45.					
	The Site Tabulations on Sheet 2 have been revised to include Phase 6 and are cross-referenced on Sheet 45.					
2	2.) PLEASE IDENTIFY ON PAGE 45 WHAT A, B, C STRUCTURES/USES ARE IF THEY ARE TO REMAIN FOR PHASE 6 OR REMOVE.					
	The "A," "B" and "C" structures may be installed during Phase 1 outside the landfill operations area, at the option of the Lorton Valley Homeowners Association, and have nothing to do with uses proposed in Phase 6 on the top of the landfill. The following note has been added to Sheet 45: "IF INSTALLED AS DETERMINED BY LORTON VALLEY HOMEOWNERS ASSOCIATION, EXISTING RECREATIONAL USE TO REMAIN. SEE SHEET 6 FOR ADDITIONAL INFORMATION."					
Item 1.03	BOUNDARIES OF ENTIRE PROPERTY, WITH BEARINGS AND DISTANCES OF THE PERIMETER PROPERTY LINES AND OF EACH ZONING DISTRICT. PLEASE PROVIDE ON PHASE 6 SPECIAL EXCEPTION PLAT.					
	We have added this layer to Phase 6 Sheet 45 as requested.					



Ms. Virginia H. Ruffner November 4, 2013 Page 2

Item 1.06	PROVIDE DIMENSIONS AND HEIGHT FOR PROPOSED STRUCTURE.
F.	Dimensions and height for the proposed operation and maintenance structure building and the accessory net containment associated with the driving range are provided on Sheet 45. No "structures" are proposed for the model aircraft flying site.
Item 1.07	LOCATION, DIMENSIONS AND LIGHTING OF ALL SIGNS.
	Dimensions of existing sign have been added as a note within the graphic. See also Note 7 on Sheet 45.
Item 1.11	DELINEATION OF THE EXISTING CENTERLINE OF ALL STREETS ABUTTING THE PROPERTY, INCLUDING DIMENSIONS FROM THE EXISTING CENTERLINE TO THE EDGE OF THE PAVEMENT AND TO THE EDGE OF THE RIGHT-OF-WAY.
	This layer had been inadvertently turned off in a prior submission and has been included on the enclosed plat.
Item 1.12	PROPOSED MEANS OF INGRESS AND EGRESS PLEASE PROVIDE ENTRANCE WIDTH AND ON SHEET 45 ROAD IS INCIDATED TO BE 20-24 FEET IN WIDTH HOWEVER, NOTE INDICATES 20-35 FEET. PLEASE CORRECT ACCORDINGLY.
	Entrance width has been provided, and Note 2 on Sheet 45 regarding road width has been corrected to indicate 20' to 24' width.
Items 1.16 -	SWM ITEMS: PROVIDE SWM CHECKLIST AND INDICATE HOW SWM IS ADDRESSED IN PHASE 6.
1.22	The SWM Checklist on Sheet 28 has been updated. See also Note 10 on Sheet 45.
Item 1.30	A STATEMENT SETTING FORTH THE MAXIMUM GROSS FLOOR AREA AND FAR PROPOSED FOR ALL USES OTHER THAN RESIDENTIAL, AND THE MAXIMUM DENSITY OF DWELLING UNITS, IF APPLICABLE.
	The Site Tabulations on Sheet 2 have been revised to include Phase 6.
Item 1.32	A PLAN SHOWING LIMITS OF CLEARING, EXISTING VEGETATION, ETC PROVIDE LEGEND.
	These requirements have been met throughout the SEA plat, and the legend has been added to Sheet 45 for Phase 6.

With the submission of the enclosed SEA Plat, dated November 1, 2013, all application acceptance review comments for this amendment should be met. We look forward to receiving confirmation that the amendment has been accepted and that LDS has been updated to reflect the amendment.



Ms. Virginia H. Ruffner November 4, 2013 Page 3

Thank you for your help.

Very truly yours,

Francis A. McDermott

Enclosures

cc: Ms. Mary Ann Tsai

Furnace Associates, Inc.



## Department of Planning & Zoning

1101 0 7 2013

Zoning Evaluation Division

HUNTON & WILLIAMS LLP 1751 PINNACLE DRIVE SUITE 1700 MCLEAN, VIRGINIA 22102

TEL 703 • 714 • 7400 FAX 703 • 714 • 7410

FRANCIS A. MCDERMOTT DIRECT DIAL: 703 • 714 • 7422 EMAIL: fmcdermott@hunton.com

FILE NO: 65145.8

October 7, 2013

#### **BY HAND**

Ms. Virginia H. Ruffner Zoning Evaluation Division Fairfax County Department of Planning and Zoning 12055 Government Center Parkway, Suite 800 Fairfax, Virginia 22035

# Furnace Associates, Inc. Special Exception Amendment SEA 80-L/V-061-2 Application Fairfax County Tax Map Parcel 113-1-((1))-5(part), 7, 8; 113-3-((1))-1, 2, 4

#### Dear Virginia:

This letter is submitted as a follow-up to our re-submission on September 11, 2013 of revised materials in the referenced Application, which among other things included an amended Special Exception Amendment ("SEA") Application form and check.

Given that the revised SEA Application has not yet been officially accepted, and as a result of further review, we are submitting the enclosed further revised SEA Application form dated October 7, 2011, in place of the one submitted on September 11. Please discard the September 11 form, which has been superseded by the enclosed. This further revised SEA Application form incorporates a request for the Board of Supervisors to approve an increase in height for the wind turbines associated with the Green Energy Park pursuant to Zoning Ordinance §§ 9-304 and 9-607. In support of the further revised SEA Application form, we also enclose a revised Statement of Justification and a further revised SEA Plat. This SEA Plat incorporates additional notes on Sheet 44 addressing certain details of the Category 3 and Category 5 end uses that were added in response to comments from DPZ Staff.

We have reviewed the Application submission checklist in Article 9 of the Zoning Ordinance, and it is our belief that all of the Article 9 submission requirements have been met for the three new proposed Category 3 Special Exception uses (quasi-public use, private club and public benefit association) and for the new proposed Category 5 Special Exception Use (golf driving range). To the extent you believe there are any remaining deficiencies, please provide specific information identifying such deficiencies as soon as possible, so that we may respond and move forward.



Ms. Virginia H. Ruffner October 7, 2013 Page 2

If you agree that we have satisfied the submission requirements of Article 9, please confirm forthwith that the amended SEA Application has been accepted and that LDS has been updated to reflect the amendment.

Thank you for your help.

Very truly yours,

Francis A. McDermott

Enclosures

cc: Mr. Gary Hewes

Mr. Conrad Mehan Ms. Mary Ann Tsai

#### FURNACE ASSOCIATES, INC. APPLICANT'S STATEMENT SPECIAL EXCEPTION AMENDMENT SEA 80-L/V-061-2 Revised October 7, 2013

Pursuant to Sections 3-104, 9-201, 9-301, 9-501 and 9-607 of the Zoning Ordinance, Furnace Associates, Inc. (alternatively, "Furnace" or the "Applicant") requests Fairfax County Board of Supervisors' (the "Board") approval to amend Special Exception Amendment SEA 80-L/V-061 ("SEA-1") on Fairfax County Tax Map Parcels 113-1-((1))-5(pt.), -7 and -8, and 113-3-((1))-1, -2 and -4 (the "Property" or "Application Property") to (i) establish green electric generation facilities including wind, solar, geothermal infrastructure and methane gas collection systems as "interim uses" to further the County's "Green Energy Triangle" initiative; (ii) extend the useful life of the existing construction debris landfill to continue land filling activities until December 31, 2040; (iii) remove the previously-approved public park uses and the dedication requirement rescinded by the Fairfax County Park Authority Board (Park Authority Board and Staff collectively "FCPA") in March 2009; (iv) entitle two private, limited-access active recreation "end uses;" and (v) create and operate an "Observation Point" as a private, controlled access accessory use. This landfill "Observation Point" would be accessed solely via shuttle service operated by the Applicant from visitor parking located on Furnace's adjacent I-6 zoned tract (Tax Map Parcels 113-1-((1))-12, -13) which is the subject of pending Proffered Condition Amendment PCA Application 2000-MV-034 (the "PCA"). No increase in maximum final elevation of the landfill is being requested in this Application. Pursuant to Paragraph 3 of Section 9-304 and Section 9-607 of the Zoning Ordinance, Board of Supervisors' approval of a Category 6 Special Exception for an increase in height pertaining to the Category 3 Quasi-Public Uses (wind turbines only) is being requested in this Application.

The approximately 250-acre Property is occupied by a Construction Demolition Debris ("CDD") landfill which is zoned R-1 and classified as a "Category 2" Special Exception ("SE") use. The Application Property generally is located between Interstate 95 and Furnace Road, south of Lorton Road and east of the County landfill, incinerator, and the Landfill Energy Systems ("LES") facility (formerly known as Michigan Co-Generation Systems, Inc.). The Applicant owns two tracts adjacent to the Property which never have been used for landfilling, approximately 9 acres and 17 acres in size, respectively, and located on the west side of Furnace Road outside the boundaries of the Application Property. As described in detail below, Furnace had proposed to construct and dedicate passive public recreation uses on the 17-acre, R-1 zoned tract (Tax Map Parcel 113-1-((1))-5(pt.)), but is now proposing to contribute \$3.2M in lieu of that in response to FCPA's specific request. Furnace continues to propose constructing an extensive solar panel farm and other green electric generating uses on the nine-acre I-6 zoned tract (Tax Map Parcels 113-1-((1))-12, -13) (the "PCA Property") upon Board approval of this Special Exception Amendment ("SEA-2") and the PCA. In addition, after significant outreach with representatives of the Lorton Valley Homeowners Association adjacent on the north to the Application Property, Furnace has committed to provide a passive recreation park for use solely by Lorton Valley residents and to be conveyed to their HOA. This park and facilities would be provided as optional uses as determined soley by the Lorton Valley HOA. Given the limited open space available within Lorton Valley, this park would provide a desirable, permanent amenity to Association residents within walking distance of their homes.

A CDD landfill has been operated on the property at least since the 1970s, and ultimately in accordance with SE 80-L/V-061 which was approved on November 16, 1981 and amended by the Board in SEA-1 on January 8, 2007. The landfill is inspected at least quarterly by the Virginia Department of Environmental Quality ("DEQ"). CDD landfills accept inert materials, such as concrete, rock, asphalt and glass, as well as scrap lumber, drywall and other debris from construction sites and land clearing activities, as approved in the Property's DEQ waste permit.

SEA-1 permits excavation, grading and filling associated with a CDD landfill, subject to 56 Development Conditions. Condition #12 limits the height of the landfill, prior to the installation of final cover, vegetation and structures, to a final elevation of 412 feet above sea level, and requires cessation of landfill operations on or before January 1, 2019 or upon reaching maximum height, whichever occurs first. SEA-1 allowed quasi-public park uses on the Property and required its dedication to the FCPA after completion of post-closure monitoring by DEQ. Subsequent to imposition of these conditions by both the FCPA and the Board, in March 2009 the FCPA determined that it would not accept the future dedication of "Overlook Ridge." FCPA's reversal negated the underlying understanding of all three parties that the public park use would be owned and operated by the FCPA and that the liability associated with public access for recreational purposes would be the FCPA's.

In SEA-2, the Applicant seeks approval to add a vegetated berm in order to develop a near-level platform by filling between the existing slope and that berm, and to extend the landfill's useful life to December 31, 2040. The Applicant also is requesting approval to erect three wind turbines within Phase 1, create renewable energy through electric generation facilities using wind, solar, methane (plus heat and cooling capability through geothermal facilities) produced on-site, and establish the near-level platform for future creation of a larger "Green Energy Park" to include up to 12 wind turbines, solar panels and/or more advanced technologies to be provided by public or other private entities with the Applicant's agreement. SEA-2 complies with the "General Standards" for all SE uses and with the "Additional Standards for the Category 2, 3 and 5 Uses" being requested, as well as the standards for increase in height per Section 9-607 as set forth in Article 9 of the Zoning Ordinance.

#### A. Type of Operation.

The Applicant proposes continuation of the existing CDD landfill activities over a phased plan of development that includes an extensive landscape planting program to be implemented both during Phases and after cessation of landfill operations.

This proposed extension of the only CDD landfill in the region with a meaningful remaining useful life, to a closure date of December 31, 2040, is consistent with and fulfills the goals set forth in the Fairfax County Solid Waste Management Plan ("SWMP"). The SWMP identifies a significant shortfall in landfill capacity for CDD generated in the County; specifically, the SWMP cites a need for 18 to 21 million tons of disposal capacity through 2025 (the end of its study period). The SWMP recommends the projected shortfall be addressed through continued use/expansion of local landfills and/or encouraging a regional approach to CDD disposal. There are two other CDD landfills in the County. One of these has effectively closed. The other site's capacity is practically exhausted. Long-term CDD disposal capacity is critical to the economic vitality, economic development, and revitalization goals of the County.

The continued availability of Applicant's landfill is crucial to solving the County's anticipated near-term exhaustion of CDD capacity.

The Applicant proposes to create a vegetated berm around the perimeter of the landfill and to fill the space between this berm and the existing side slope to develop the landfill's capacity over five, overlapping phases of operation. Reinforcement material, consisting of a geo-synthetic such as a "geo-grid" (commonly high density polyethylene which is the same material used in landfill liners), would be laid horizontally, adding strength and stability to the berm and requiring less earth material within a smaller footprint than a comparable earth-only berm. Facing materials also would include a geo-synthetic and be designed to promote vegetative growth. The vegetated berm and ground-level and upper-level access roads would be completed over five phases as depicted on Sheets 6 through 13 of the SEA-2 Plat. The Applicant also requests approval to add a "Right-In Only" access point, which would improve on-site queuing, filling and circulation patterns. As depicted on the Landscape Plans (Sheets 16 through 22 of the SEA-2 Plat), nearly 5,800 trees would be planted on benches, mostly on the northern and eastern slopes of the landfill, with some on the western slope, by the completion of Phase 5.

The Applicant proposes to locate a "Green Energy Park" on the landfill in accordance with the recommendations of the County's Energy Task Force (renamed the "Energy Alliance Task Force") and the broader, long-term sustainable energy goals established by the Board. One recommended goal of the Task Force was to establish a "Green Energy Triangle" as a transformational energy project in Lorton. In addition to installing and operating three wind turbines (Category 2 SE Electric Generating Facilities and Category 3 SE Quasi-Public Uses) beginning in Phase 1, as well as geothermal and methane recovery facilities, the SEA-2 Plat provides a platform (enabled by the vegetated berm) for the potential of up to 12 wind turbines and/or a solar panel farm to be provided by the Applicant/Owner or others after Phase 5.

Each of the three wind turbines to be installed on-site by the Applicant will be capable of producing at least one-quarter megawatt peak of electricity on that interim, southern portion of the platform as depicted on Sheet 6 of the SEA-2 Plat. The first turbine will be installed no later than 18 months after all necessary County, Virginia, and Federal approvals for the landfill and turbines have been obtained. The second and third turbines will be installed within 36 months after having received all such approvals. Fifty percent of any revenue, in excess of 2.5 cents per Kilowatt-hour, the Applicant receives from the sale of the electricity produced by the wind infrastructure will be donated to the County.

The Applicant also will install a methane gas recovery system within the landfill and will deliver to the County methane sufficient to generate the equivalent of two million kilowatt hours annually of electricity, with the intent that it will be used by the County to generate electricity sufficient for the normal operating needs of the County-owned former Lorton Workhouse site (the Lorton Arts Foundation "Workhouse Arts Center"), thereby reducing the financial burdens of the Workhouse Arts Center. Applicant will pay the cost of processing the methane gas so that it is suitable for combustion by industry standard co-generation infrastructure.

Additional, off-site proposals have been made by the Applicant in conjunction with this Application. The Applicant's I-6 zoned land located adjacent to the west of Furnace Road on the PCA Property is approved for sorting and separation of CDD for recycling. The Applicant's current business plan for the PCA Property is to accept the CDD currently accepted by the

landfill, should the landfill cease operation on January 1, 2019 as required by SEA-1 Condition 12, and recycle that CDD. Truck traffic currently entering the Applicant's landfill site is prohibited from approaching the site from Lorton Road, which is a major transportation artery for local residents. The PCA Property has no such restriction and has no required closure date. Cessation of landfill activity and redirection of related truck traffic to the PCA Property would result in a significant increase in truck traffic on Lorton Road and adjoining feeder roads. The mixed waste reclamation center would require, by its nature, that all material delivered to the site be transported out to end users or CDD landfills. This would increase the volume of truck traffic on neighboring roads (as opposed to the landfill use which does not require the transportation of CDD away from the site), and would require long distance transportation which would consume approximately 21,268,170 million gallons of diesel fuel over a 22 year period and produce approximately 236,076 tons of carbon dioxide equivalent. The benefit of these proposed revisions directly supports the County's objective to meet Clean Air Act National Ambient Air Quality Standards.

As proposed in the PCA, the Applicant is prepared to abandon this by-right "mixed waste reclamation" use and to erect a solar electric generating facility, complementary to green energy uses on the Property. Within 24 months after having received all necessary County, Virginia and Federal approvals for implementation of SEA-2, the Applicant will install and operate at least a one-half megawatt peak solar infrastructure on the PCA Property for distribution and sale on the electrical grid. All costs associated with the purchase, installation, operation, and electricity distribution of the solar infrastructure will be the responsibility of the Applicant. The infrastructure will be operated for its useful life. Fifty percent of any revenue, in excess of 2.5 cents per Kilowatt-hour, the Applicant receives from the sale of the electricity produced by the solar infrastructure will be given to the County.

Remaining surface area on the I-6 site will allow for additional solar infrastructure, or other renewable energy operations, should the Applicant, or others with the Applicant's permission, elect to build out additional renewable energy capacity. Also on the I-6 parcels (see the PCA), the Applicant proposes to locate all visitor parking for the landfill "Observation Point." Access to the "Observation Point" would be strictly controlled by the property owner with limited access to the public who would be required to sign liability waivers and releases and travel on-site in the shuttle van up to the "Observation Point.'

"Overlook Ridge," which was requested by the Applicant and the FCPA, and approved by the Board in January 2007, is proposed to be eliminated in this SEA-2 Application to reflect the FCPA's decision in March 2009 to reject dedication of the landfill site by ESI to the FCPA. SEA-2 continues to provide for open space and passive recreation facilities, but to be constructed in the north side buffer zone (which would be accessed from a trail connection to Lorton Valley) and on Applicant's 17 acres of R-1 land on the west side of Furnace Road, which the Applicant proposes to dedicate to the FCPA.

The SEA also contemplates that funding will be provided for an educational feature at the Workhouse Arts Center that relates to the renewable energy activities both on the Applicant's sites as well as on the neighboring County property.

As shown on Plat Sheets 6 through 10, an "Observation Point" would be installed by the Applicant during Phase 1 in the general location of the three, pilot wind turbines and be open for

visitors when the three turbines begin operation. Outdoor style, wooden bench seating would be provided for up to approximately 20 visitors, with a lectern at the head of benches to provide for speakers. Tourist style telescopes (on posts) would be provided at the east and west flanks of the "Point" area. Actual location of each telescope could vary from edge of seating area to ridges of the elevation, in which case stone dust type trails would lead to the telescopes. Information signs describing the "Green Energy Triangle," history of the area, and local attractions would be provided. This initial Observation Point would exist from the end of Phase 1 until the beginning of Phase 5.

At the beginning of Phase 5, when the three pilot wind turbines are removed (to permit filling and capping of the southern area), the Observation Point and its related features would be relocated northward with the understanding that its exact location likely will need to be adjusted as Phase 5 landfill operations and capping proceed toward closure. An Observation Point and shuttle service would remain in operation through the duration of the post-closure period (2050). Please note that, for public safety, during Phase 5 operations there would have to be a gap or transition period (not to exceed 18 months) during which no Observation Point will be available due to filling, settling and capping of the 40-acre top platform. The Observation Point would continue through approximately 2050 and cease to exist upon release of the Applicant by DEQ from post-closure monitoring and maintenance of the landfill. A dustless surface waiver has been requested to provide access to this use, both for the initial gravel access road during Phases 1-4 and the subsequent gravel access proposed to be provided in Phase 5 through the post-closure period.

As depicted on Plat Sheets 6 through 10 and on Sheet 2 of the Generalized Development Plan Amendment ("GDPA") filed in the PCA (and described in the plat notes), access to this Observation Point would be controlled by the property owner solely via shuttle and with the requirement that each visitor execute a liability waiver and release. Consequently, parking on the landfill for this accessory use would be minimal. Visitors would park at the solar farm located on the PCA Property. Section 11-102 of the Zoning Ordinance allows offsite parking on a contiguous site under the same ownership, subject to compliance with certain conditions as may be approved by the Board.

The Applicant would commit to two established times for tours each week, and also allow a limited number of tours to be scheduled on demand with ample notice. Both the regular and on-demand tours would require a minimum and maximum number of visitors to go forward, and the frequency of regularly scheduled tours may be reduced to reflect actual demand. Scheduled day(s)/hours would enable the property owner to allow visitors during the landfill's less busy operational timeframes. Applicant will implement a pre-registration system to better organize the groups in terms of numbers, special needs, obtaining executed waivers and releases, etc.

This CDD landfill currently accepts select volumes of dredged soils from lakes, ponds, and stormwater management facilities in the County that are either publicly or privately maintained. (Certain of these dredged soils are accepted by the landfill for free, which saves the County significant costs.) Over time, such facilities accumulate sediment which, if not removed, will severely reduce their ability to function effectively, resulting in a serious threat to County and regional water quality and stormwater capacity. Extending the closure date to 2040 will

provide a long-term outlet for dredged soils produced in the County, a critical environmental need since there are no dredged soil treatment facilities in the County or the region.

The interim and ultimate landscape planting design will establish an attractive buffer with a forested appearance. Instead of becoming a "closed landfill," this proposal creates a unique opportunity for renewable, green energy-producing facilities that functionally relate to the surrounding utility system and provide environmental sustainability and economic benefits to the County in the 21<sup>st</sup> century.

This SEA-2 has evolved over the course of 18 months of extensive discussion and negotiation with the South County Federation Land Use Committee ("LUC") pursuing an alternative to the pre-empted Overlook Ridge, and simultaneous outreach with other community and countywide stakeholders. The Applicant committed to development of a Green Energy Park ("GEP") with four robust re-usable energy components – wind, solar, methane, and geo-thermal – plus certain additional revenue-generated contribution commitments. The LUC discussions came to a halt in late May 2012 despite leadership representations of support up to that time. At the Countywide level, a recommendation by a County Energy Task Force resulted in Board adoption of a Green Energy Triangle concept for the immediate landfill area and commitments to establishment of a national model for the location of substantial green energy infrastructure components on public and private land in that area.

Applicant's commitment had been to the provision of the GEP infrastructure and other proposed amenities, some of it up front and the remainder through 2040, the proposed operational life of its landfill needed to support such an enormous expenditure. In late November 2012, the LUC requested that Applicant instead fund a Recreation Center. The Applicant responded with a proposal to provide a significant but revised GEP infrastructure "up front," with a payment of \$15M over time towards a specified community need. The LUC continues to demand a Recreation Center to be funded at the outset of the "new" landfill operations at a cost, according to FCPA, of \$50M (including debt service through 2040).

This Application proposes to construct, during Phase I, wind, methane and geothermal infrastructure on the landfill, and solar on the PCA Property (on which it will relinquish its entitled mixed waste reclamation facility); to provide methane fuel to the County for the Workhouse Arts Center and/or other local County facility, over the operational life of the landfill, enabling to the County an avoided energy cost of \$5M to \$6.25M; to donate 50% of the revenue, in excess of 2.5 cents per Kilowatt-hour, resulting from sale of electricity generated by the proposed wind and solar infrastructure; to provide educational features related to renewable energy at the Workhouse Arts Center or at such other location as agreed upon with the Applicant; at the specific request of FCPA, to contribute \$3.2M to FCPA for recreational facilities in the Lorton Area, in lieu of Applicant's previous offer to dedicate a 17-acre parcel to the FCPA and provide recreational amenities on that parcel; and to contribute \$15M towards a specified local County/community need, in installments of \$750,000 per year beginning in 2019 and ending in 2038.

As referenced above, the total cash and energy value being contributed to the County, FCPA, and community exceeds \$23M, plus revenue sharing in electricity sales. The cost to the Applicant of the amenities and GEP infrastructure to be constructed exceeds \$15M. These numbers do not include (i) the value of the I-6 land and entitled, unlimited mixed waste

reclamation use Applicant is willing to forego, and (ii) the long-term benefit that the Applicant's green energy park as a cornerstone provides in the rebranding of the Lorton area as one of the most progressive communities in the region, if not nationally.

As requested by the Planning Staff, revised SEA-2 Plat Sheet 44 seeks approval of alternative private active recreation uses which will consist of either a private golf driving range and/or a model aircraft field, or similar private club or benefit association uses, either: (a) subsequent to cessation of the "interim" Green Energy Program, if installed, around approximately 2060, or (b) if the GEP is never implemented, upon release of the Applicant by DEQ from post-closure monitoring and maintenance of the landfill. The lessees would assume liability for private use on the closed landfill property.

#### B. Hours of Operation.

Proposed hours of operation are Monday through Friday 7:00 a.m. to 5:30 p.m. and Saturday 7:00 a.m. to 3:00 p.m., with continuation of certain limited exceptions as permitted under the SEA-1 Development Condition #27.

#### C. <u>Estimated Number of Patrons.</u>

No change from current and prior experience. The number of patrons varies with weather conditions, time of year and the prevailing economy, which directly impacts regional development activity and the amount of construction debris to be disposed.

#### D. Proposed Number of Employees.

It is anticipated that there will be approximately 15 full-time equivalent employees working at the landfill during the operations time period.

#### E. <u>Estimate of Traffic Impact of the Proposed Use.</u>

No change to landfill operations is proposed, so there will be no change in related trip generation. As prepared by Wells + Associates, Inc., trip generation estimates associated with the proposed SEA-2 use are based on the 2011 load counts taken at the landfill truck scales and are as follows:

	Acres	Annual Loads	Average	Average
			Daily Loads	Daily Trips
Existing Use	250	112,698	394	788
Proposed Use (estimated)	250	112,698	394	788
Net New Loads and Trips		0	0	0

Attached is a copy of the FCDOT determination dated July 31, 2012 that no Chapter 870 (formerly 527) study is required because no material increase in trip generation is projected.

#### F. <u>Vicinity or General Area to be Served.</u>

This is a regional CDD landfill which serves the entirety of Fairfax County.

#### G. <u>Description of Building Façade and Architecture.</u>

After creating the southern portion of the platform during Phase 1, the Applicant proposes to erect three (3) wind turbines (see SEA-2 Plat Sheet 6). Other minor "structures" consist of construction trailers, with all but one to be demolished or removed during the course of development. One permanent operations trailer with an associated parking lot will be located in the northwest corner of the property and remain subsequent to Phase 5 closure. Other facilities are leachate pump houses, gate houses and gates, portable scale houses, scales, and tire wash facilities which will be relocated on-site during phases as necessary when landfilling operations are adjusted over the five phases. These facility locations are identified by Phase on the SEA-2 Plat.

#### H. <u>Listing, If Known, of All Hazardous or Toxic Substances</u>.

Hazardous and/or toxic substances currently stored and contained on-site are limited to products which are used for the general operation of the landfill, its equipment and vehicles. Methods for use and disposal shall adhere to County, State and/or Federal law.

## I. <u>Statement of Conformance with Applicable Ordinances, Regulations and Standards.</u>

This Application shall comply with all applicable ordinances, regulations and standards, with the exception of requested waivers and modifications as outlined below. This Application shall comply with the "General Standards" for all Special Exceptions and with any other "Standards" for the Category 2 (Landfills and Electrical Generating Facilities), Category 3 (Quasi-Public Uses, Private Clubs and Public Benefit Associations) and Category 5 (Golf Driving Ranges) Special Exception uses set forth in the Zoning Ordinance. A detailed compliance analysis of the "General Standards" and "Additional Standards" has been prepared by the Applicant and filed with County Staff on October 7, 2013.

In addition, Board of Supervisors' approval for an increase in height for "Quasi-Public Uses" (wind turbines only) is being requested pursuant to Paragraph 4 of Section 9-304 and Section 9-607. The Application complies with the "Standards" set forth in Paragraphs 1 through 3 of Section 9-607. The requested increase in height for the wind turbines is in harmony with Comprehensive Plan policies which encourage renewable energy and reuse of landfills. Wind turbines will not be detrimental to the character and development of adjacent land due to their proposed locations at elevations on the upper, central locations on the 250 acre site and low visual impact from adjacent properties (see photo illustratives filed July 25, 2013). The remaining R-1 District provisions are satisfied.

The Applicant seeks a waiver of the dustless surface requirement for on-site roads, including for the initial gravel access road during Phases 1-4 and the subsequent gravel access proposed to be provided in Phase 5 through the post-closure period and for the Phase 6 active recreation uses. The upper and lower berm access roads also are proposed to be gravel. This waiver is appropriate given the unusually large site, the nature of the uses being proposed in the various phases and fact that private vehicle access is strictly limited and controlled for landfill and for the other uses being proposed.

A waiver of the Countywide Trails Plan requirement for an eight-foot (8') wide trail along the east side of Furnace Road also is being requested. This waiver is appropriate due to the nature of the use, the lack of room between the right-of-way and the landfill berm, because such improvement would not connect to any portion of an established trail system, and a trail exists of the west side of Furnace Road along the frontage of Parcels 12 and 13.

As described in detail on the SEA Plat, the Applicant is requesting modifications of tree preservation requirements and of the transitional screening requirement and waiver of the barrier requirements in favor of those shown on the Special Exception Amendment Plat in accordance with Article 13, Section 13-305, subparagraphs -3, -5, -7, -11, -12 and -14, of the Zoning Ordinance. A minimum fifty foot-wide treed buffer shall be provided along the entire northern property boundary and consist of a combination of existing, mature trees and supplemental plantings which shall be installed and maintained by the Applicant in accordance with that Minimal grading shall be permitted within this buffer area, as shown on Plat Sheet 21. determined by the Urban Forestry Management Division, as necessary for installation of the below trail and/or other improvements. Adjacent to this buffer area, a natural trail and any offsite trail connection, exercise stations along the trail, a multi-purpose open space area, a dog park, and picnic tables shall be provided at the sole option of and to the extent determined by the Lorton Valley HOA. At the sole option of the Lorton Valley HOA, the recreation uses shown may be eliminated or adjusted, provided that they do not encroach into the fifty foot wide buffer area.

Pursuant to Section 11-102 of the Zoning Ordinance, the Applicant also is requesting Board of Supervisors' approval of an off-site parking and shuttle access to the "Observation Point" which would be strictly controlled by the property owner with the requirement that each visitor execute a liability waiver and release. Consequently, parking on the landfill for this accessory use would be minimal. Visitors would park at the solar farm located on the PCA Property. Section 11-102 of the Zoning Ordinance allows offsite parking on a contiguous site under the same ownership, subject to compliance with conditions as may be approved by the Board.

Francis A. McDermott Attorney for Applicant



### County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

October 24, 2013

Mr. Francis A. McDermott 1751 Pinnacle Drive, Suite 1700 Mclean, VA 22102

Re:

Special Exception Amendment Application

Dear Mr. McDermott:

The Special Exception Amendment Application submitted on behalf of Furnace Associates Inc has been reviewed for compliance with the provisions of Section 9-011 of the Fairfax County Zoning Ordinance. Based on this review, it has been determined that the SEP does not meet the minimum submission requirements and therefore has not been accepted for processing. Attached to this letter is a listing of the deficiencies which must be addressed before the required development plan(s) are determined to be sufficient.

If you have any questions regarding the steps necessary to meet the submission requirements, please call the Application Acceptance Section at (703) 324-1290.

Sincerely

Virginia H. Ruffner, Planner III

Application Acceptance Section, ZED, DPZ

VHR

Attachments: a/s

File: SEA 2013-0252